P1748R1

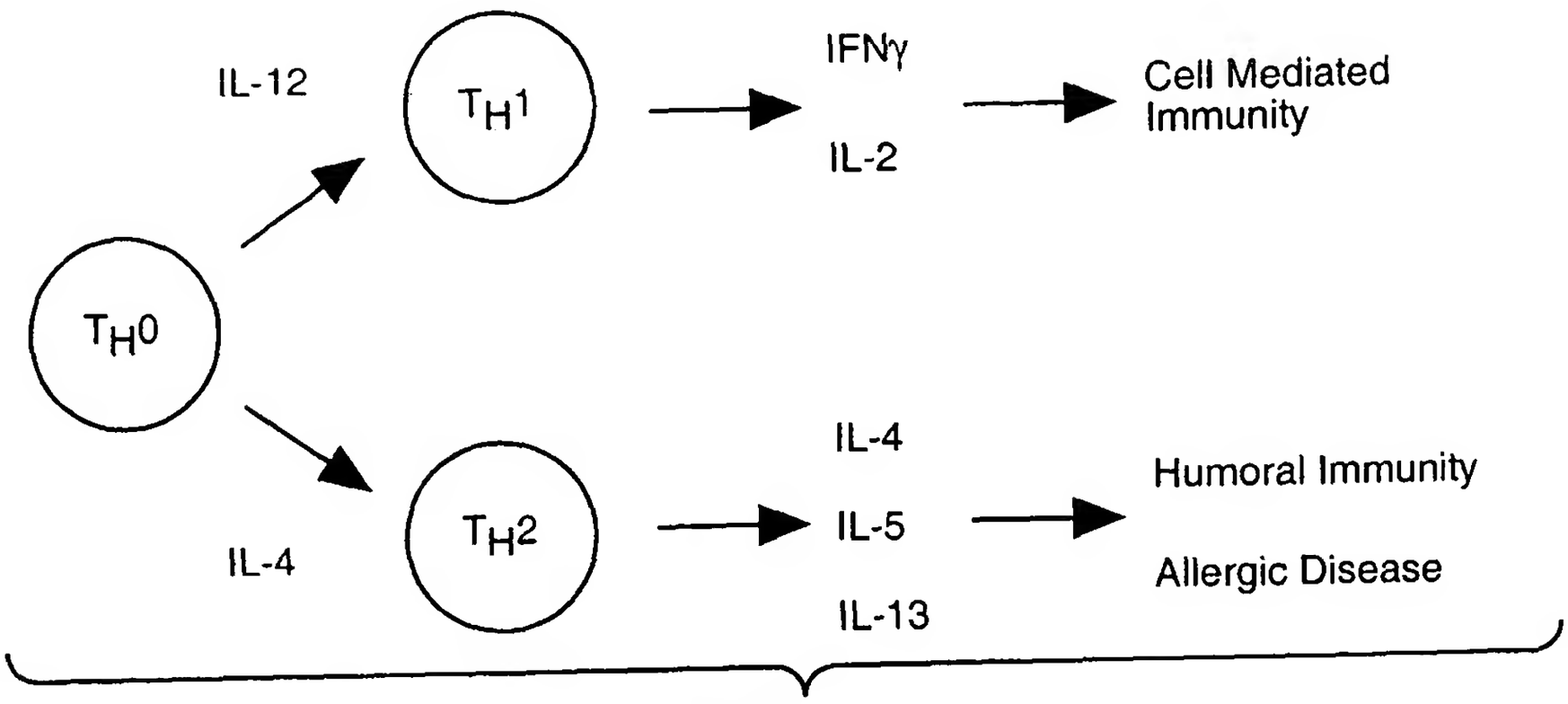


FIG._1

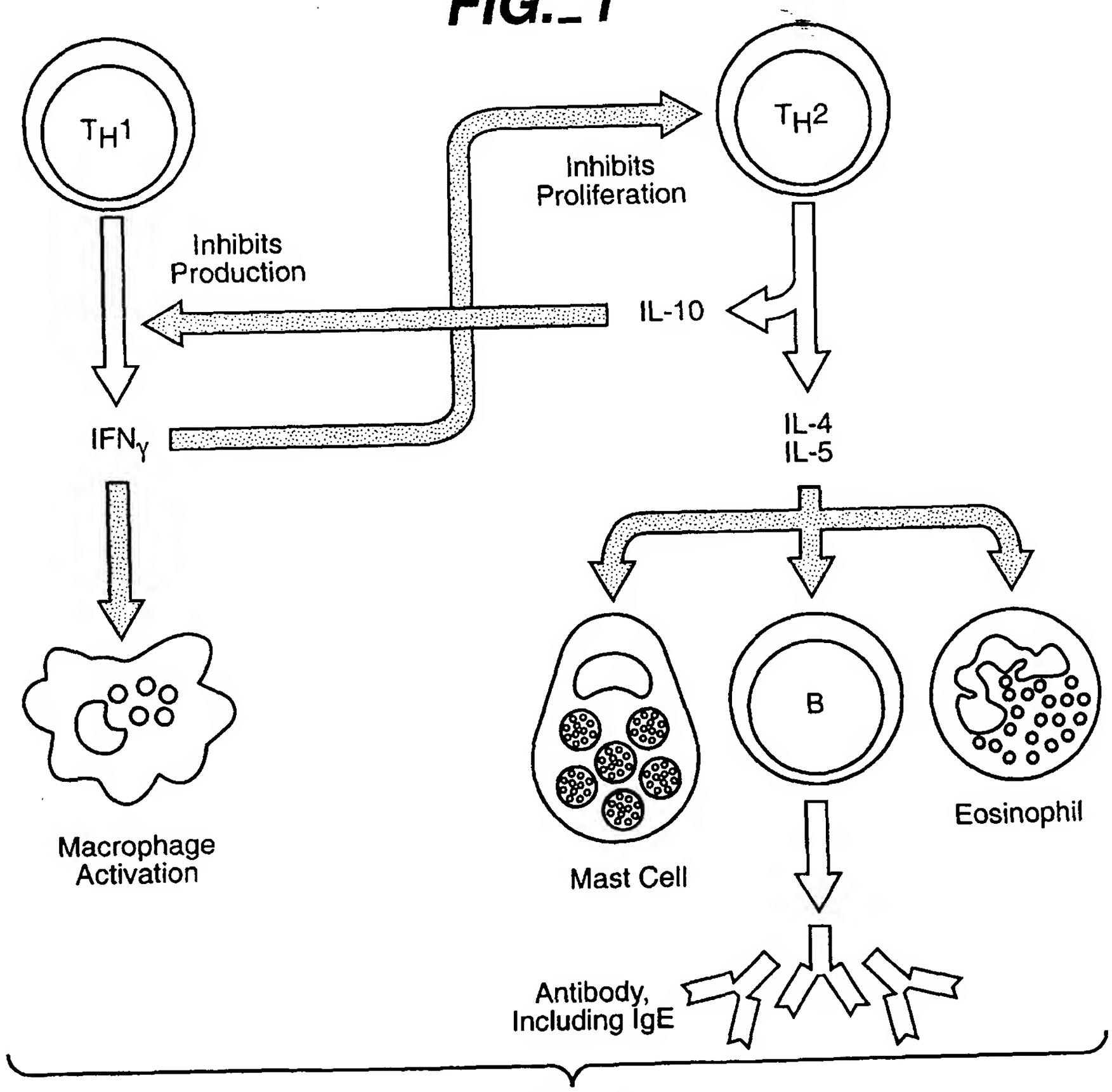


FIG._2

MRGGRGAPFWLWPLPKLALLPLLWVLFQRTRPQGSAGPLQCYGVGPLGDLNCSWEPLGD
LGAPSELHLQSQKYRSNKTQTVAVAAGRSWVAIPREQLTMSDKLLVWGTKAGQPLWPPV
FVNLETQMKPNAPRLGPDVDFSEDDPLEATVHWAPPTWPSHKVLICQFHYRRCQEAAWT
LLEPELKTIPLTPVEIQDLELATGYKVYGRCRMEKEEDLWGEWSPILSFQTPPSAPKDV
WVSGNLCGTPGGEEPLLLWKAPGPCVQVSYKVWFWVGGRELSPEGITCCCSLIPSGAEW
ARVSAVNATSWEPLTNLSLVCLDSASAPRSVAVSSIAGSTELLVTWQPGPGEPLEHVVD
WARDGDPLEKLNWVRLPPGNLSALLPGNFTVGVPYRITVTAVSASGLASASSVWGFREE
LAPLVGPTLWRLQDAPPGTPAIAWGEVPRHQLRGHLTHYTLCAQSGTSPSVCMNVSGNT
QSVTLPDLPWGPCELWVTASTIAGQGPPGPILRLHLPDNTLRWKVLPGILFLWGLFLLG
CGLSLATSGRCYHLRHKVLPRWVWEKVPDPANSSSGQPHMEQVPEAQPLGDLPILEVEE
MEPPPVMESSQPAQATAPLDSGYEKHFLPTPEELGLLGPPRPQVLA

FIG._3

MNRLRVARLTPLELLLSLMSLLLGTRPHGSPGPLQCYSVGPLGILNCSWEPLGDLETPPV
LYHQSQKYHPNRVWEVKVPSKQSWVTIPREQFTMADKLLIWGTQKGRPLWSSVSVNLETQ
MKPDTPQIFSQVDISEEATLEATVQWAPPVWPPQKALTCQFRYKECQAEAWTRLEPQLKT
DGLTPVEMQNLEPGTCYQVSGRCQVENGYPWGEWSSPLSFQTPFLDPEDVWVSGTVCETS
GKRAALLVWKDPRPCVQVTYTVWFGAGDITTTQEEVPCCKSPVPAWMEWAVVSPGNSTSW
VPPTNLSLVCLAPESAPCDVGVSSADGSPGIKVTWKQGTRKPLEYVVDWAQDGDSLDKLN
WTRLPPGNLSTLLPGEFKGGVPYRITVTAVYSGGLAAAPSVWGFREELVPLAGPAVWRLP
DDPPGTPVVAWGEVPRHQLRGQATHYTFCIQSRGLSTVCRNVSSQTQTATLPNLHSGSFK
LWVTVSTVAGQGPPGPDLSLHLPDNRIRWKALPWFLSLWGLLLMGCGLSLASTRCLQARC
LHWRHKLLPQWIWERVPDPANSNSGQPYIKEVSLPQPPKDGPILEVEEVELQPVVESPKA
SAPIYSGYEKHFLPTPEELGLLV

FIG._4

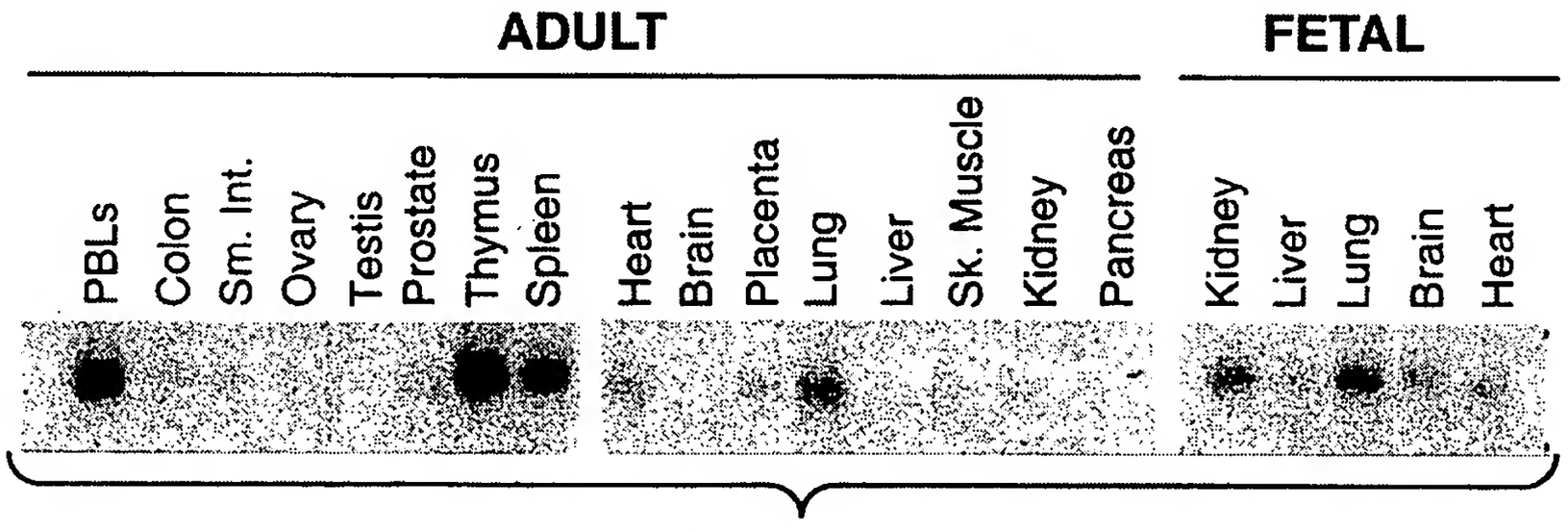


FIG._6

Inventor: DESAUVAGE ET AL.
Docket No.: 11669.123USC1
Title: TYPE I CYTOKINE RECEPTOR TCCR
Attorney Name: DENISE M. KETTELBERGER, PH.D.
Phone No.: 612.332.5300


```
h-TCCR   1    MRGGRGAPFWLWPLPKLALLPLLWVLFQRTRPQGSAGPLQCYGVGPLGDLL
m-TCCR   1    -----MNRLRVARLTPLELLLSLMSLLLGTRPHGSPGPLQCYSVGPLGILL

h-TCCR   51   NCSWEPLGDLGAPSELHLQSQKYRSNKTQTVAVAAGRSWVAIPREQLTMSS
m-TCCR   46   NCSWEPLGDLETPPVLYHQSQKYHPNRVWEVKVPSKQSWVTIPREQFTMAA

h-TCCR   101  DKLLVWGTKAGQPLWPPVFVNLETQMKPNAPRLGPDVDFSEDDPLEATVH
m-TCCR   96   DKLLIWGTQKGRPLWSSVSVNLETQMKPDTPQIFSQVDISEEATLEATVQ

h-TCCR   151  WAPPTWPSHKVLICQFHYRRCQEAAWTLLEPELKTIPLTPVEIQDLELAT
m-TCCR   146  WAPPVWPPQKALTCQFRYKECQAEAWTRLEPQLKTDGLTPVEMQNLEPGT

h-TCCR   201  GYKVYGRCRMEKEEDLWGEWSPILSFQTPPSAPKDVWVSGNLCGTPGGEE
m-TCCR   195  CYQVSGRCQVENGYP-WGEWSSPLSFQTPFLDPEDVWVSGTVCETSGKRA

h-TCCR   251  PLLLWKAPGPCVQVSYKVWFWVGGRELSPEGITCCCSLIPSGAEWARVSA
m-TCCR   245  ALLVWKDPRPCVQVTYTVWFGAGDITTTQEEVPCCKSPVPAWMEWAVVSP

h-TCCR   301  VNATSWEPLTNLSLVCLDSASAPRSVAVSSIAGSTELLVTWQPGPGEPLE
m-TCCR   295  GNSTSWVPPTNLSLVCLAPESAPCDVGVSSADGSPGIKVTWKQGTRKPLE

h-TCCR   351  HVVDWARDGDPLEKLNWVRLPPGNLSALLPGNFTVGVPYRITVTAVSASG
m-TCCR   345  YVVDWAQDGDSLDKLNWTRLPPGNLSTLLPGEFKGGVPYRITVTAVYSGG

h-TCCR   401  LASASSVWGFREELAPLVGPTLWRLQDAPPGTPAIAWGEVPRHQLRGHLT
m-TCCR   395  LAAAPSVWGFREELVPLAGPAVWRLPDDPPGTPVVAWGEVPRHQLRGQAT

h-TCCR   451  HYTLCAQSGTSPSVCMNVSGNTQSVTLPDLPWGPCELWVTASTIAGQGPP
m-TCCR   445  HYTFCIQSRGLSTVCRNVSSQTQTATLPNLHSGSFKLWVTVSTVAGQGPP

                                   TM
h-TCCR   501  GPILRLHLPDNTLRWKVLPGILFLWGLFLLGCGLSLATS----GRCYHLR
m-TCCR   495  GPDLSLHLPDNRIRWKALPWFLSLWGLLLMGCGLSLAST RCLQARCLHWR
                                   TM
h-TCCR   547  HKVLPRWVWEKVPDPANSSSGQPHMEQVPEAQPLGDLPILEVEEMEPPPV
m-TCCR   545  HKLLPQWIWERVPDPANSNSGQPYIKEVSLPQPPKDGPILEVEEVELQPV
                  Box 1
h-TCCR   597  MESSQPAQATAPLDSGYEKHFLPTPEELGLLGPPRPQVLA
m-TCCR   595  VES---PKASAPIYSGYEKHFLPTPEELGLLV
```

FIG._5

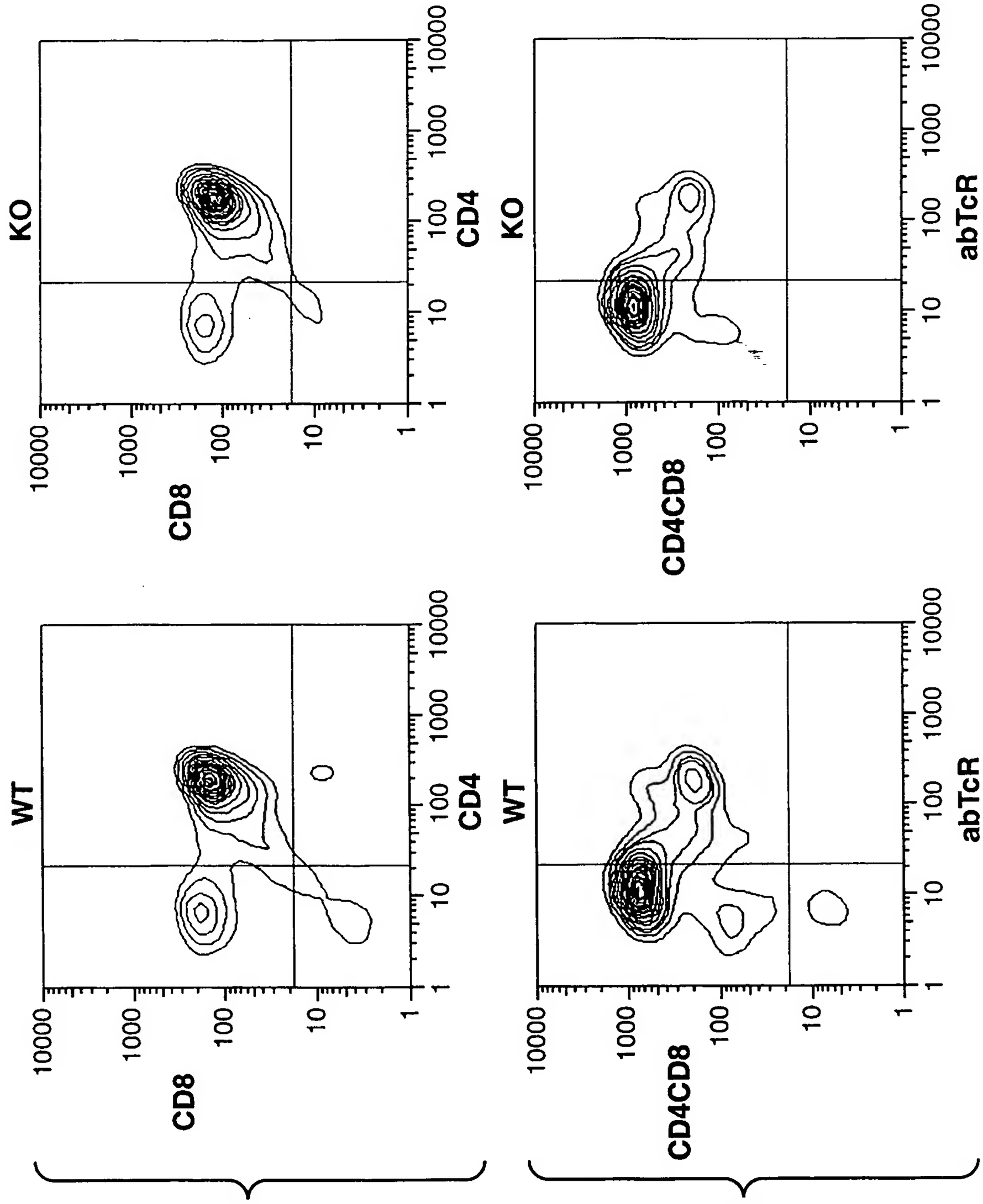

KO
CD4
abTcR
CD8
CD4CD8
WT
CD4
abTcR
CD8
CD4CD8
10000
1000
100
10
1

FIG._7A

FIG._7B

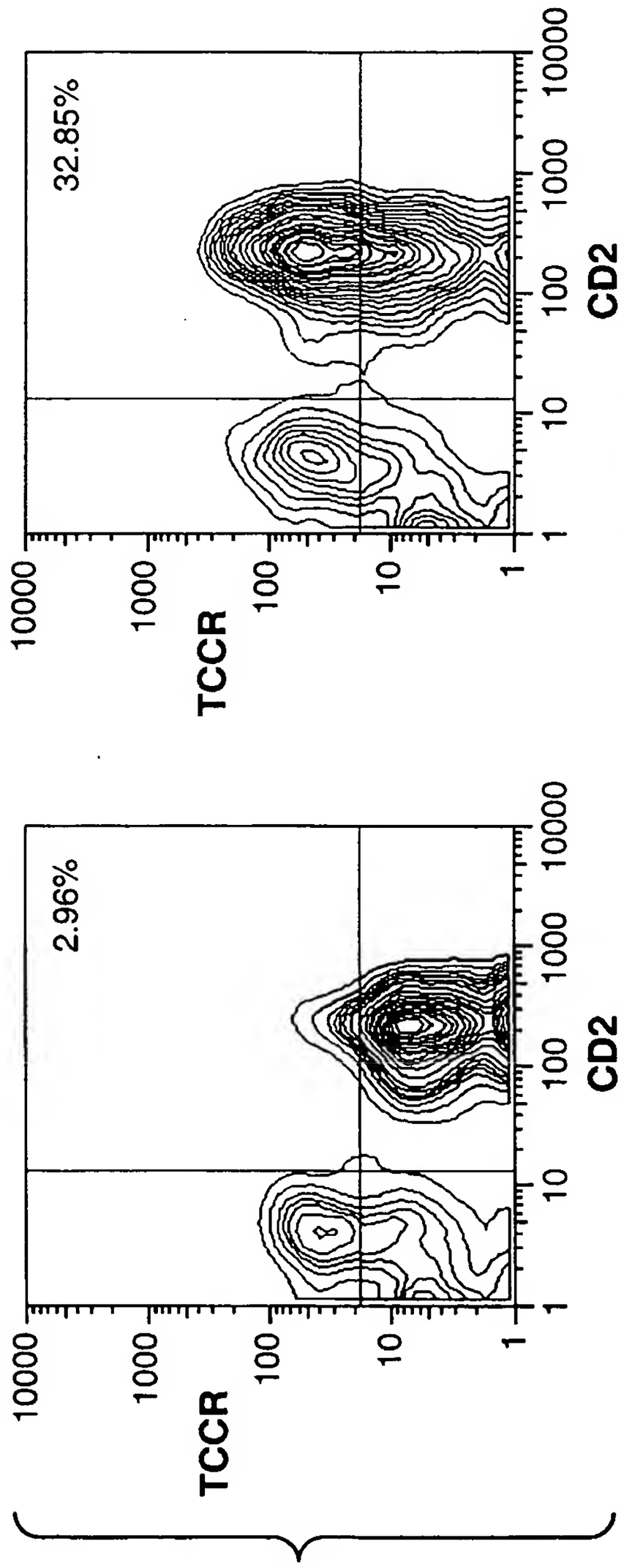

32.85%
2.96%
CD2
TCCR
1
10
100
1000
10000

FIG._8A

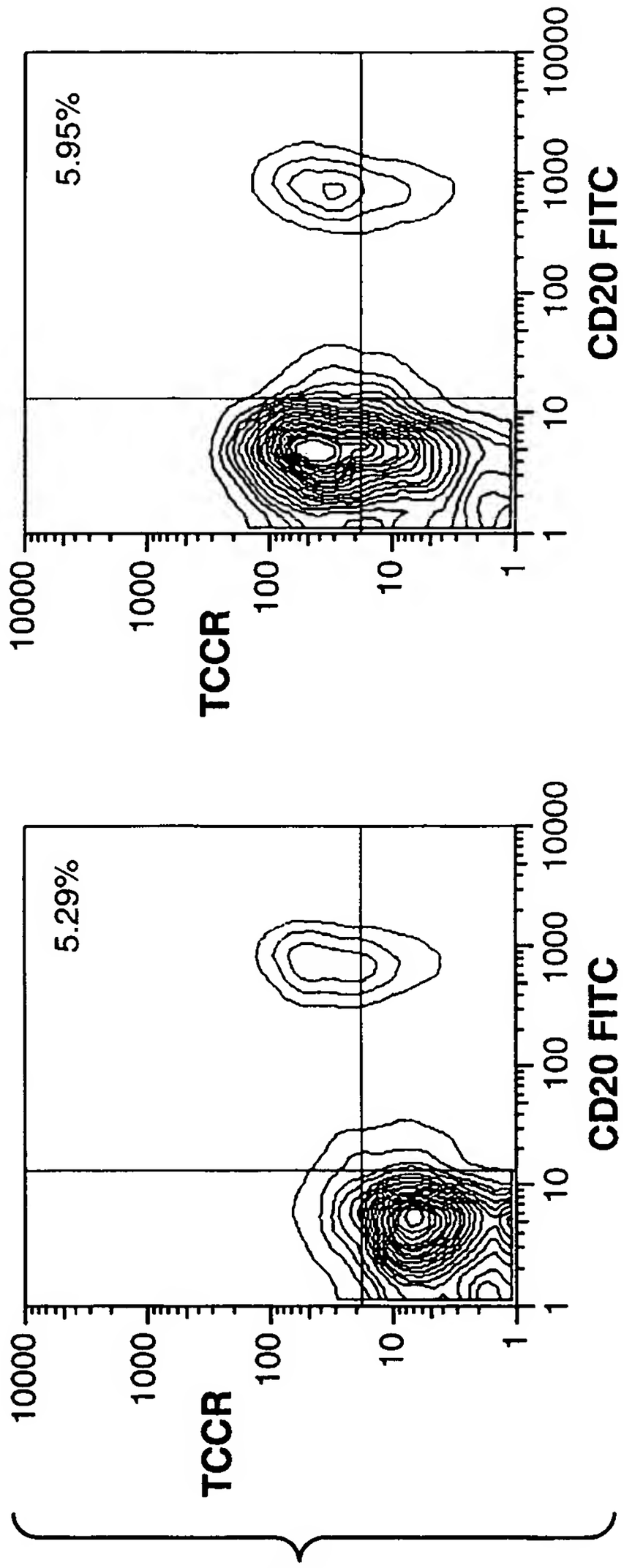

5.95%
5.29%
CD20 FITC
TCCR
1
10
100
1000
10000

FIG._8B

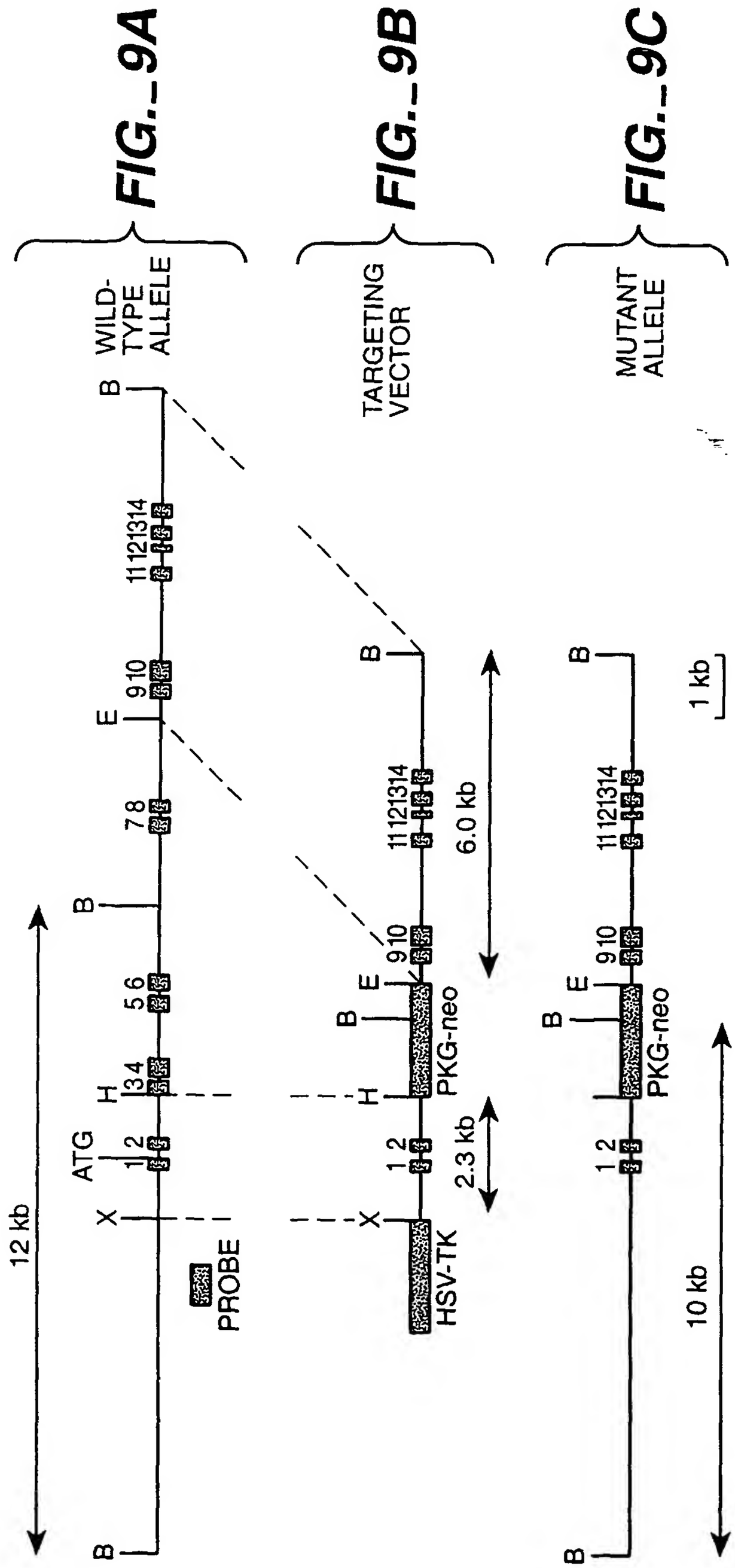


FIG._9A
FIG._9B
FIG._9C
WILD-TYPE ALLELE
TARGETING VECTOR
MUTANT ALLELE
B
E
X
H
ATG
PROBE
HSV-TK
PKG-neo
12 kb
6.0 kb
2.3 kb
10 kb
1 kb
1 2 3 4 5 6 7 8 9 10 11 12 13 14

FIG._10A

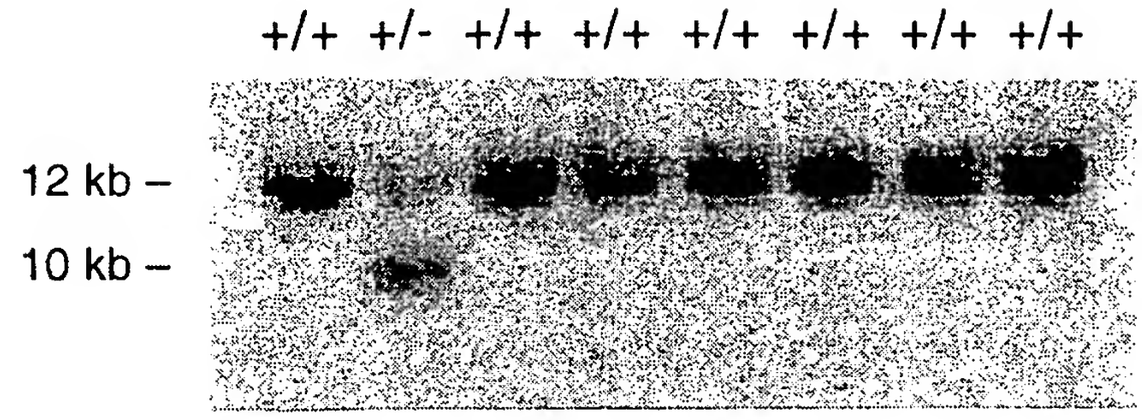


FIG._10B

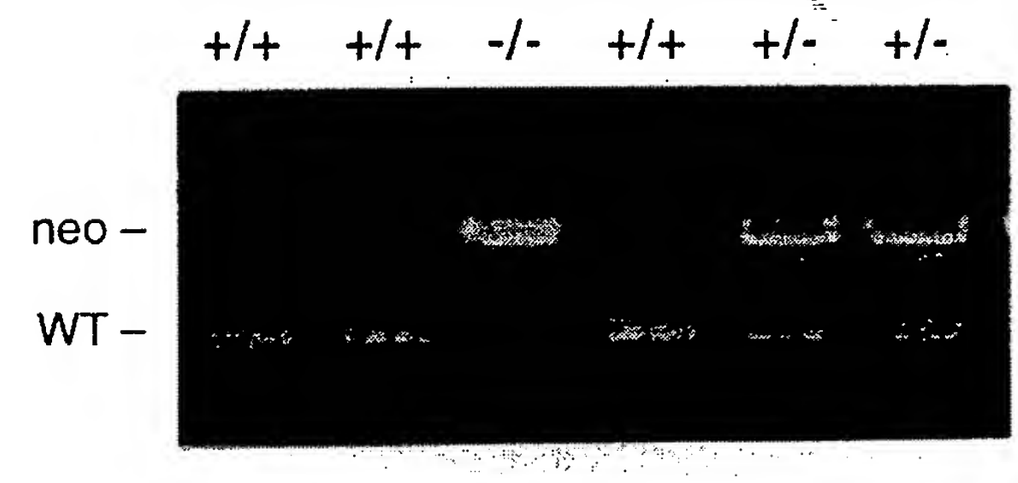
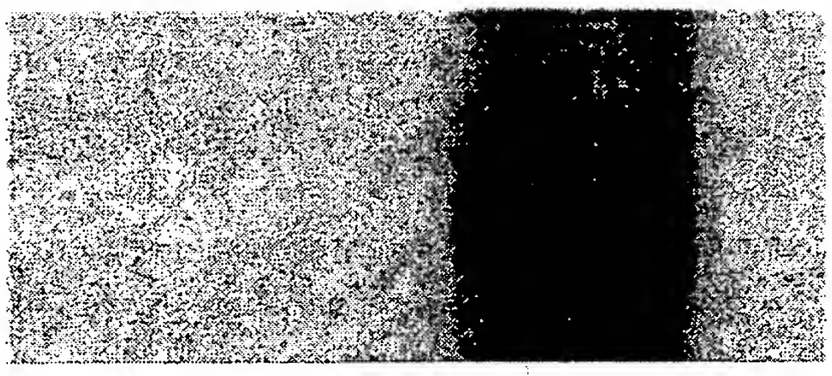


FIG._10C



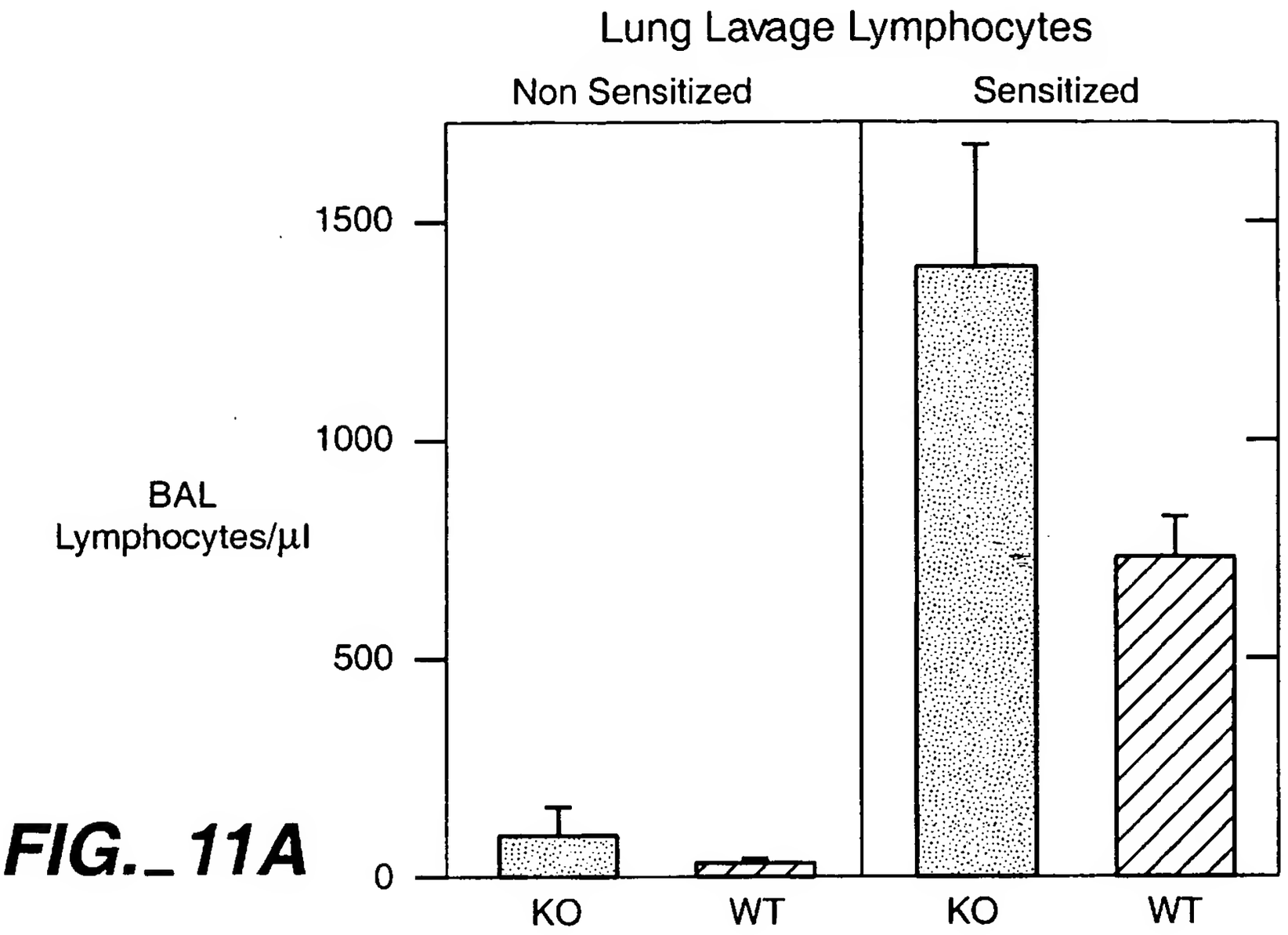


FIG._11A

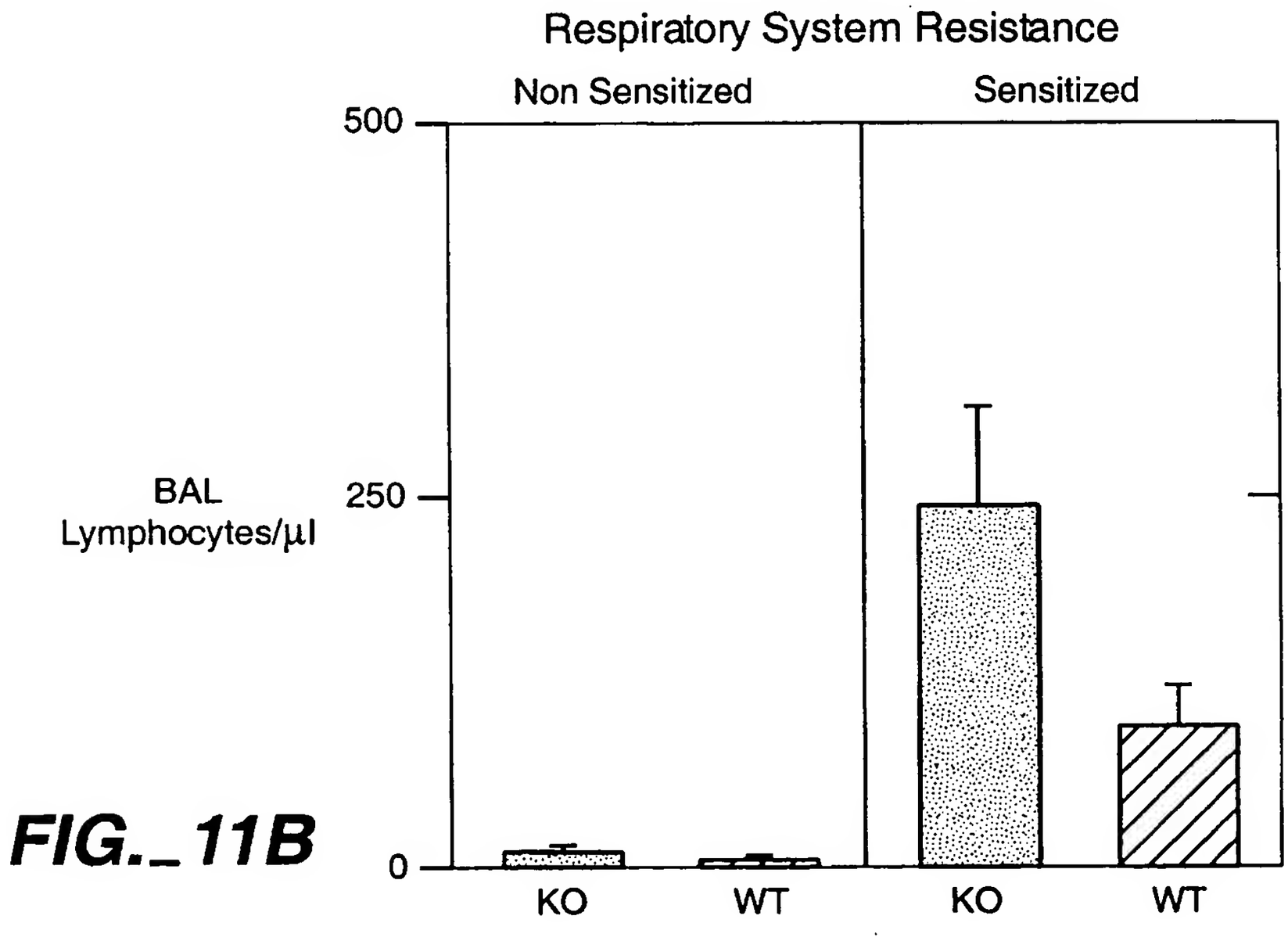


FIG._11B

P1748R1

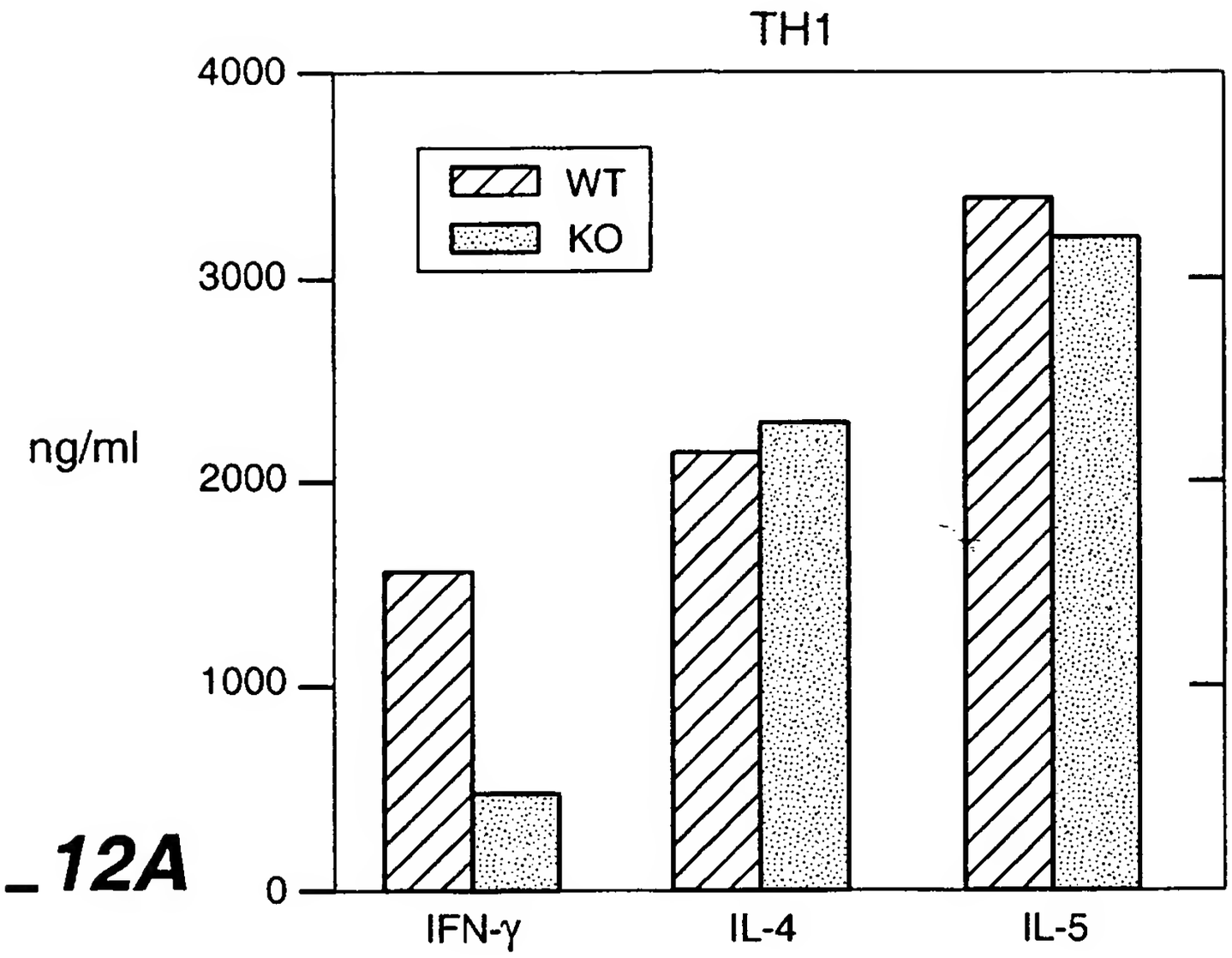


FIG._12A

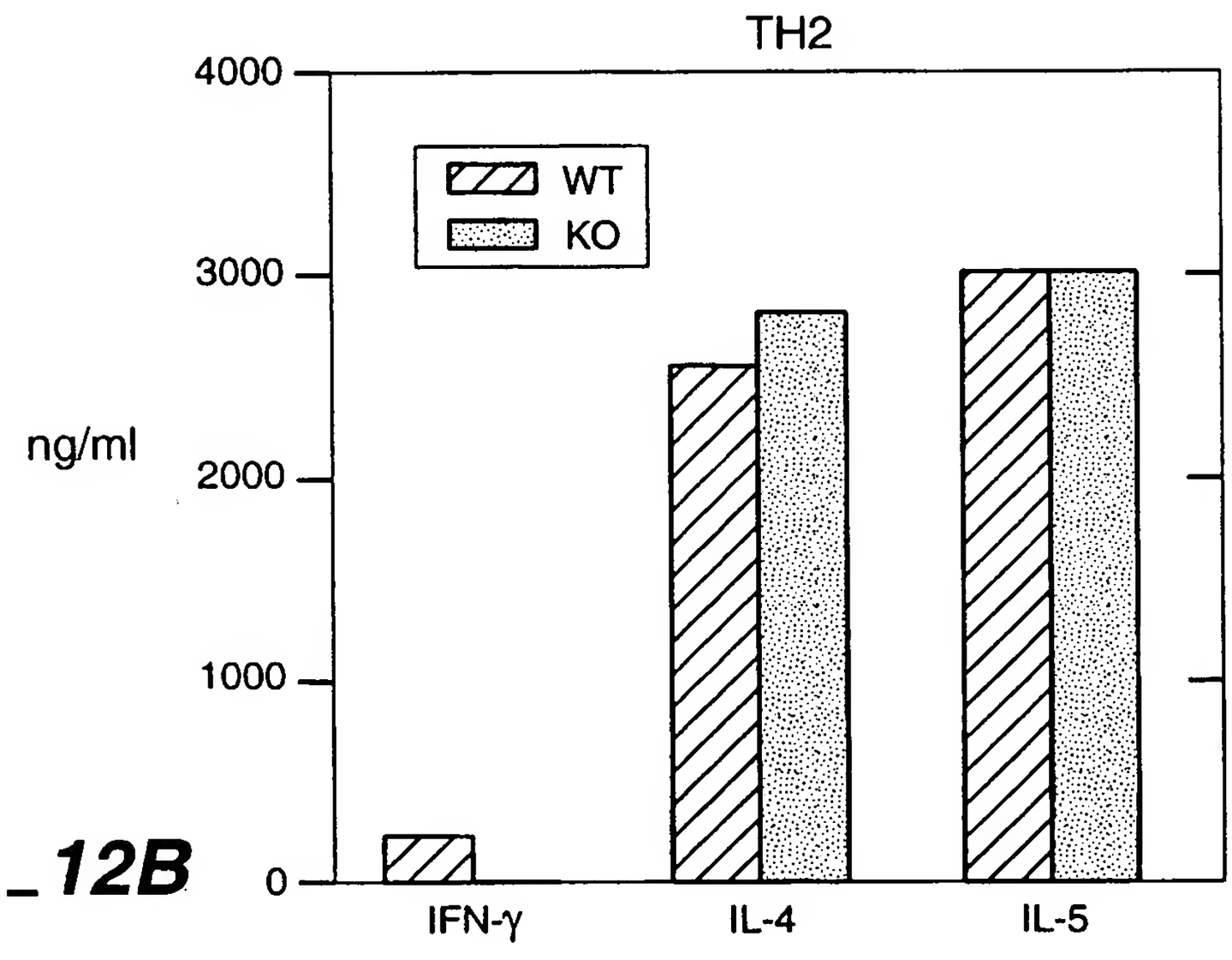


FIG._12B

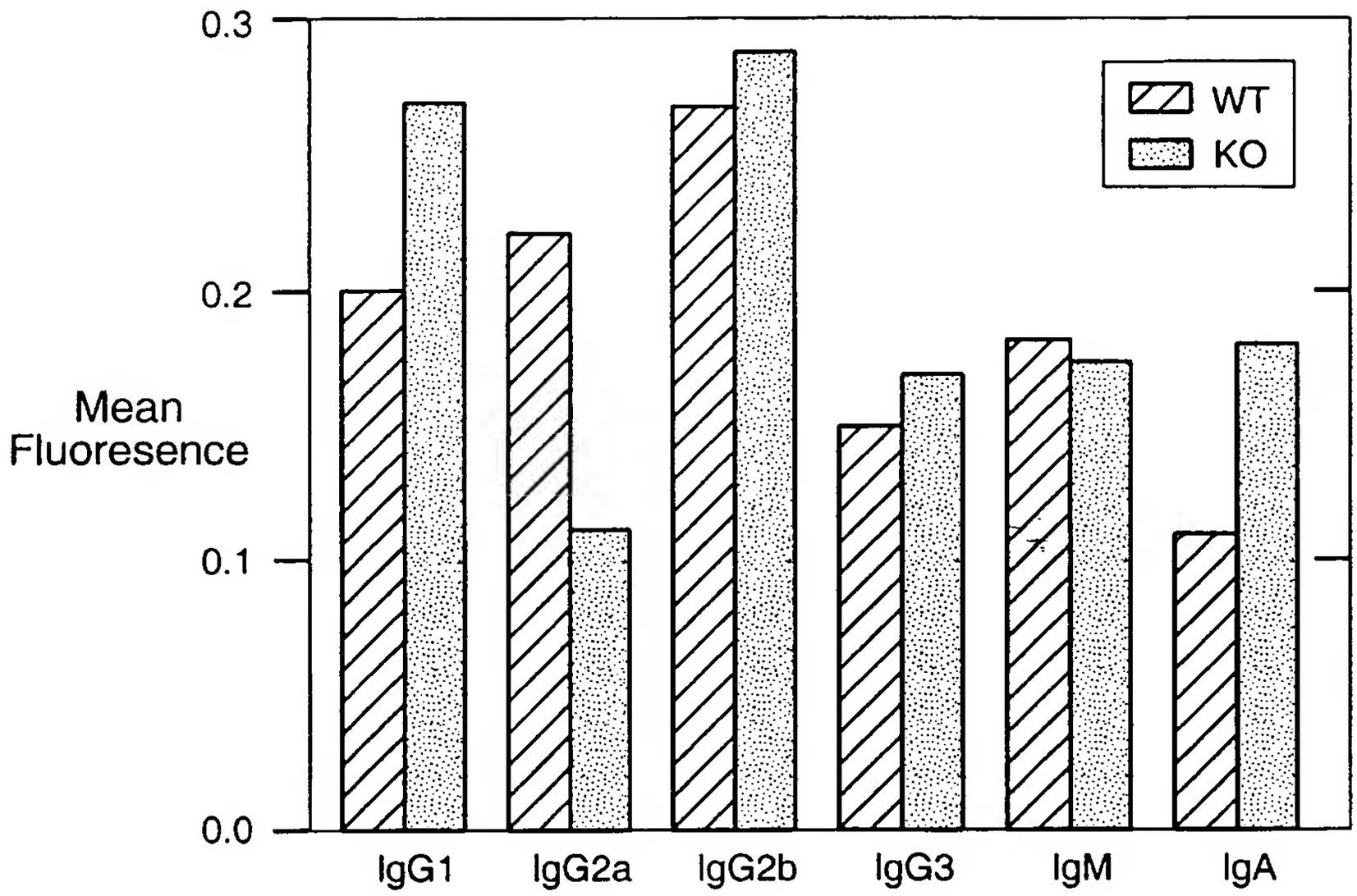

0.3
0.2
0.1
0.0
Mean
Fluoresence
WT
KO
IgG1
IgG2a
IgG2b
IgG3
IgM
IgA

FIG._13

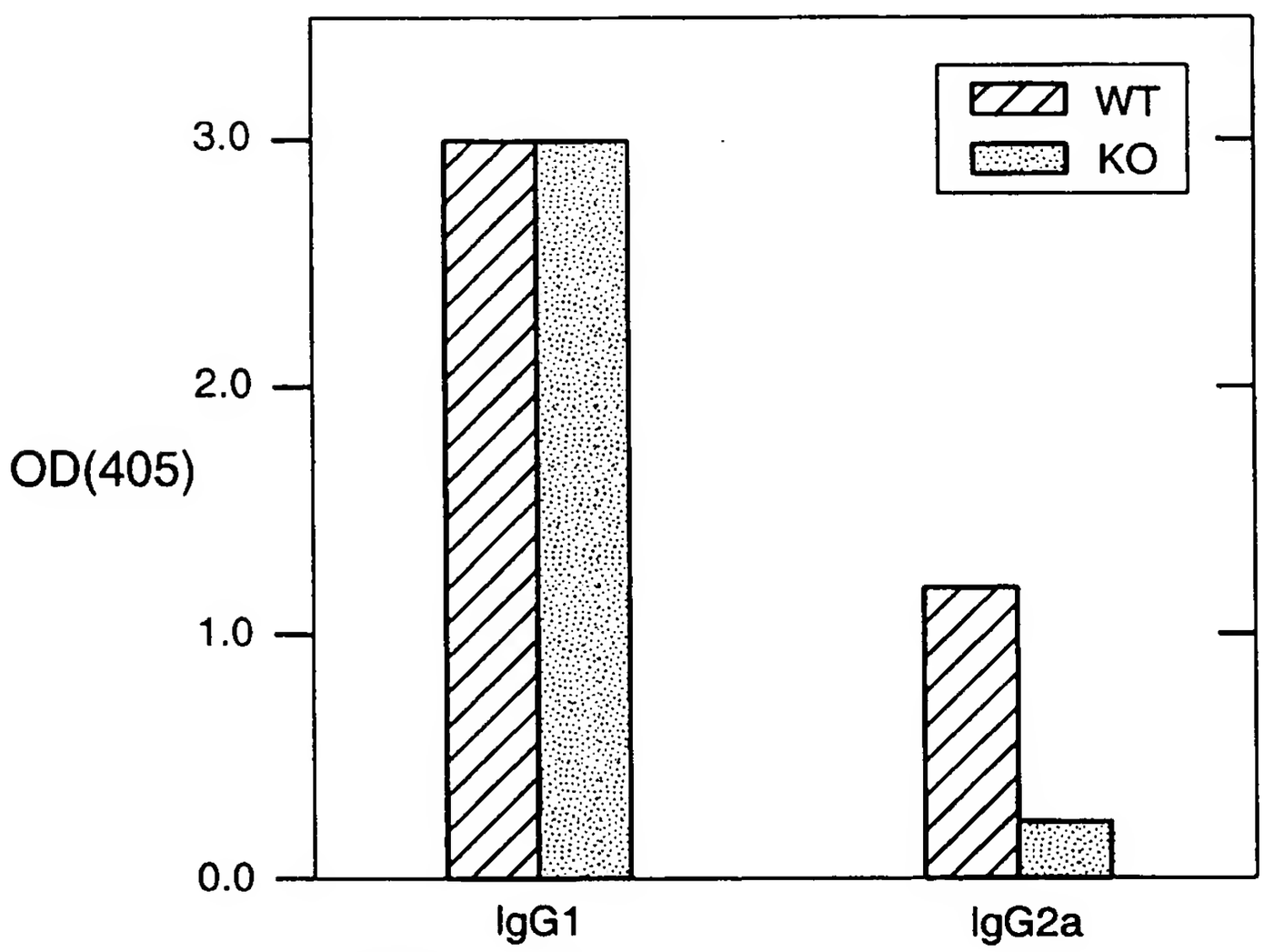

3.0
2.0
1.0
0.0
OD(405)
WT
KO
IgG1
IgG2a

FIG._14

P1748R1

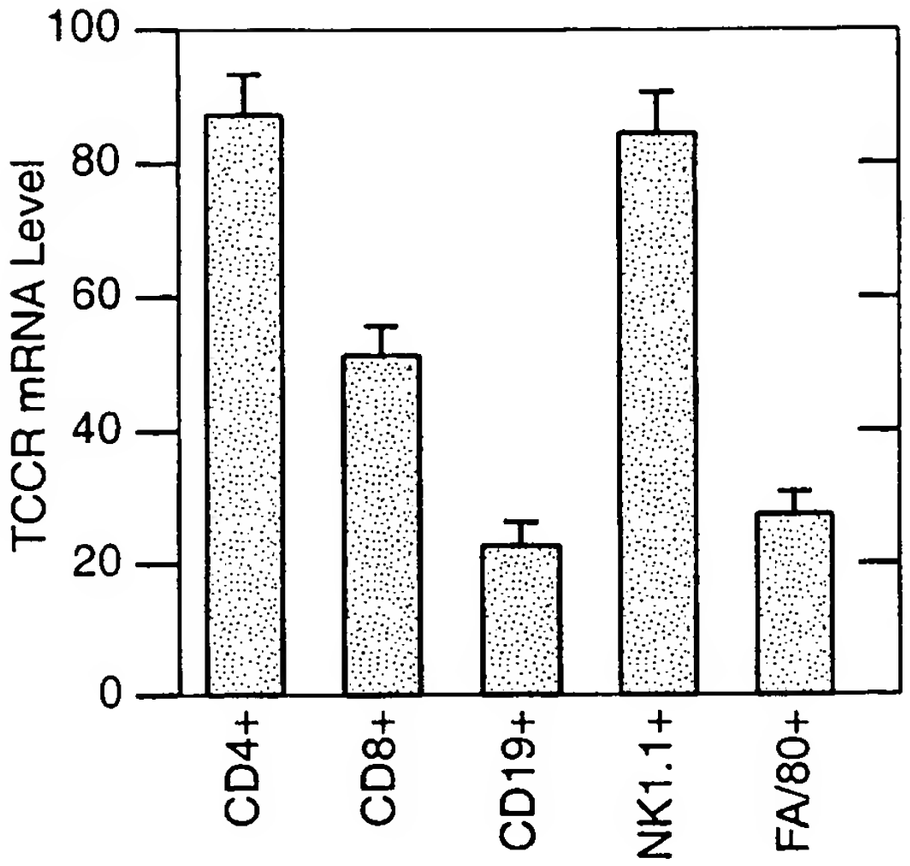


FIG._15A

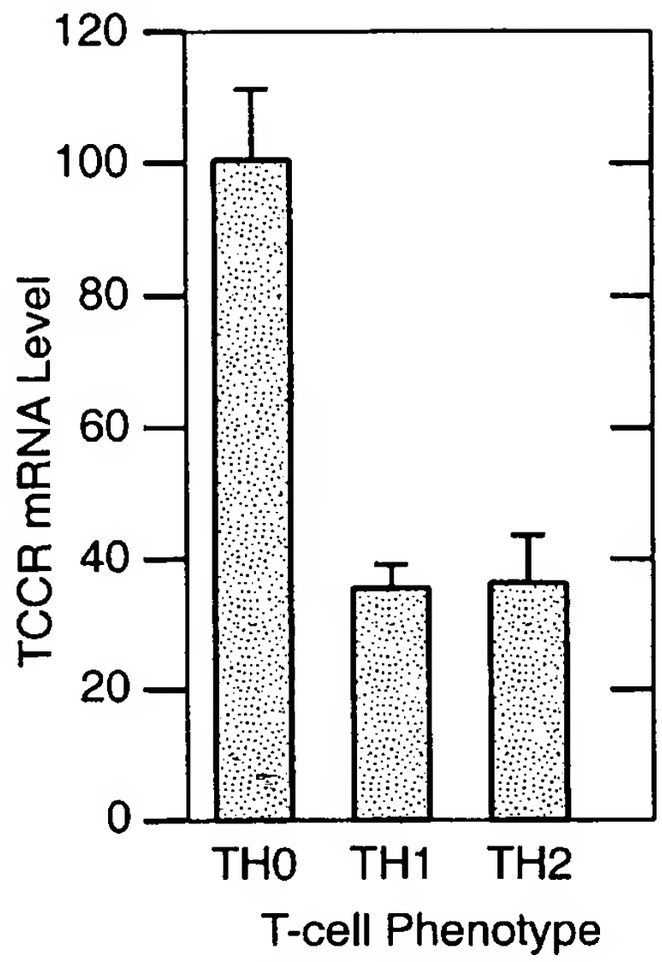


FIG._15B

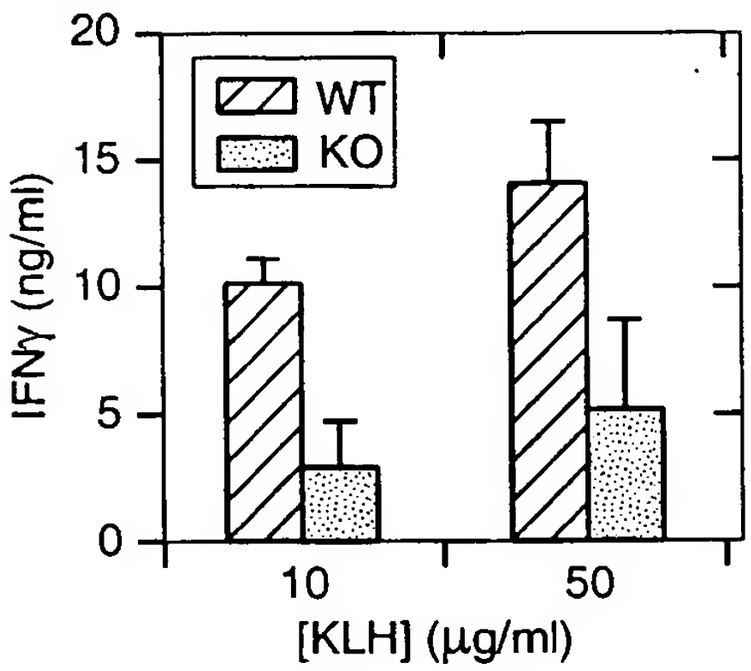


FIG._16A

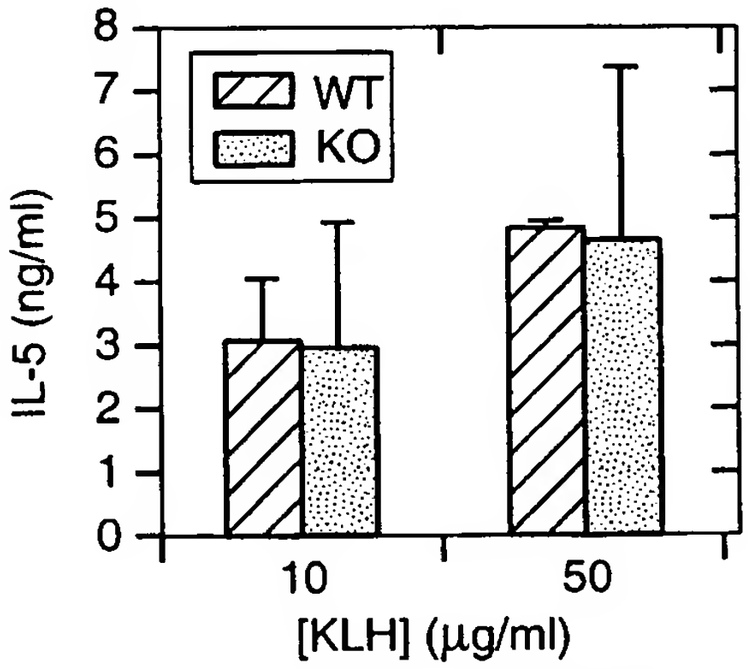


FIG._16C

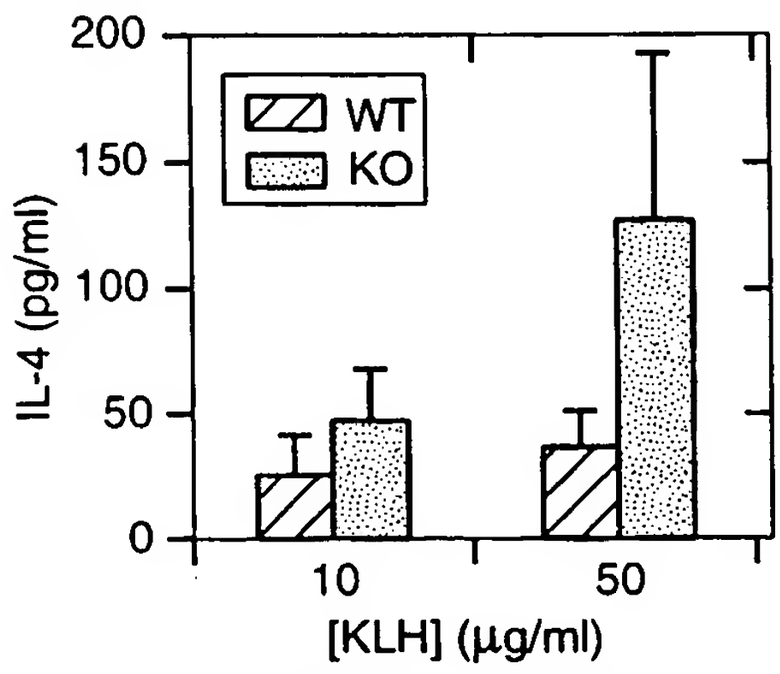


FIG._16B

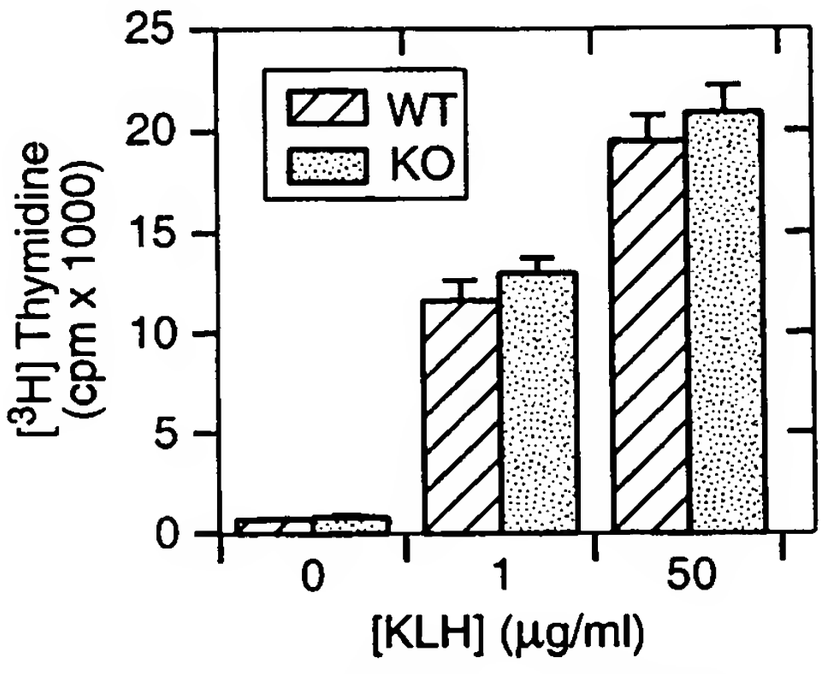


FIG._16D

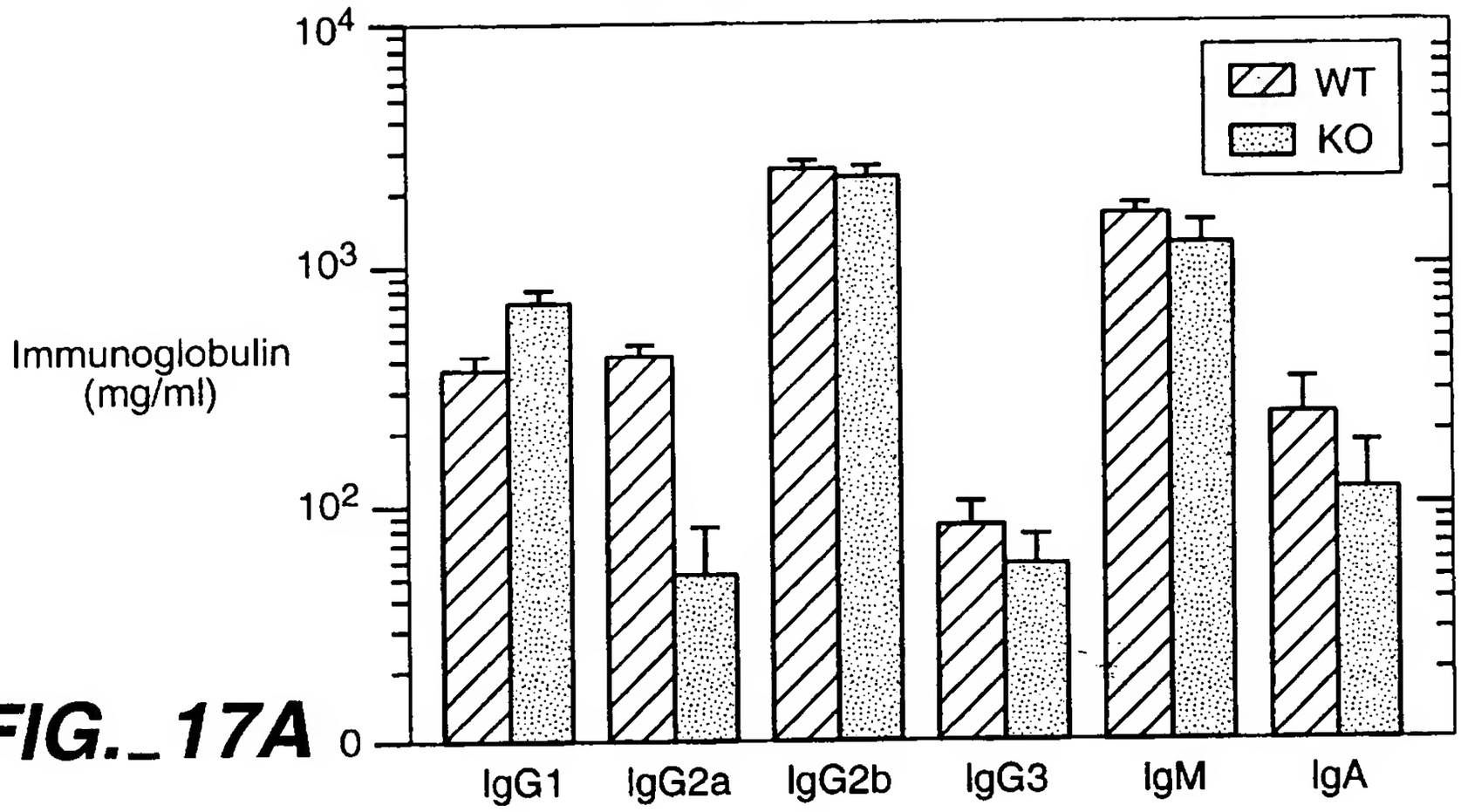


FIG._17A

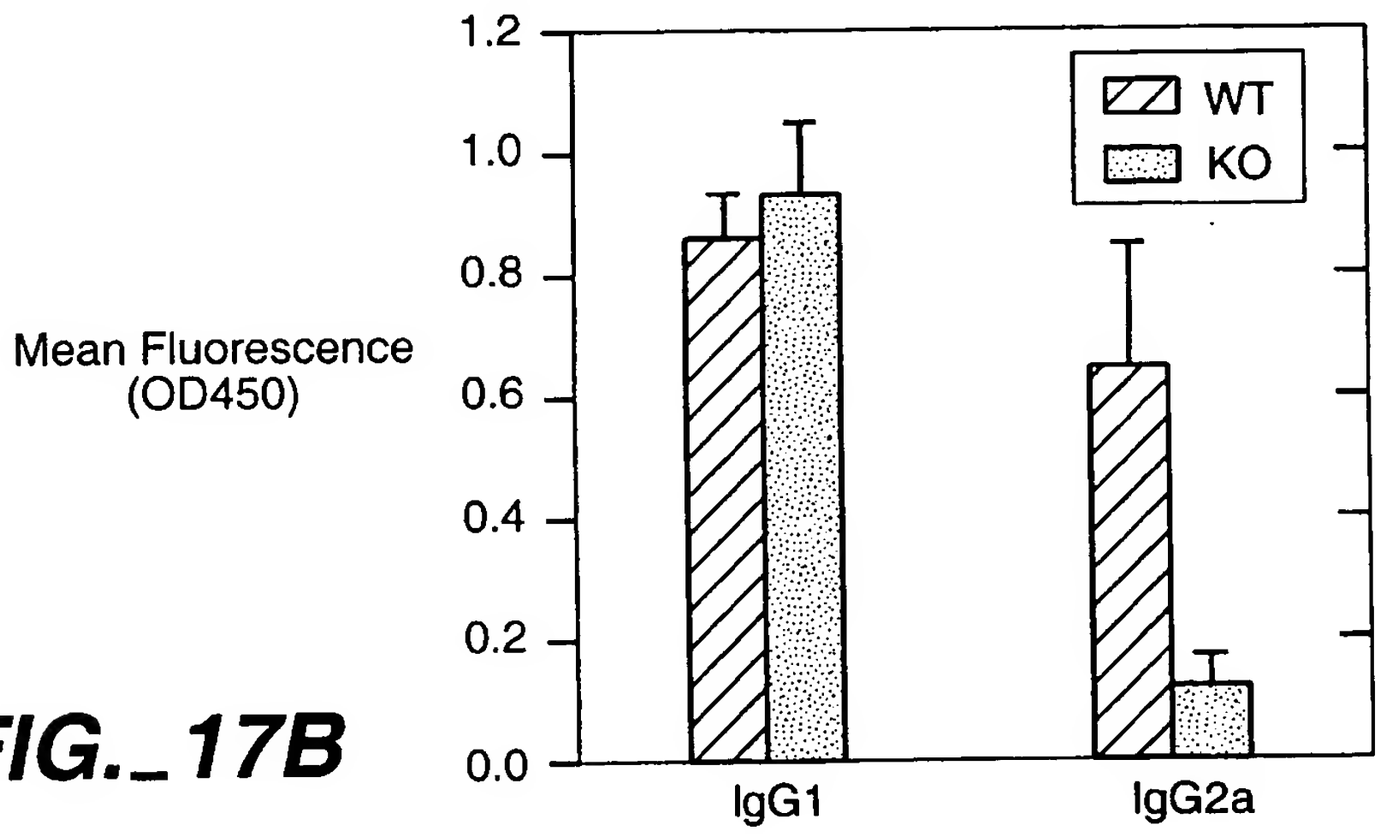


FIG._17B

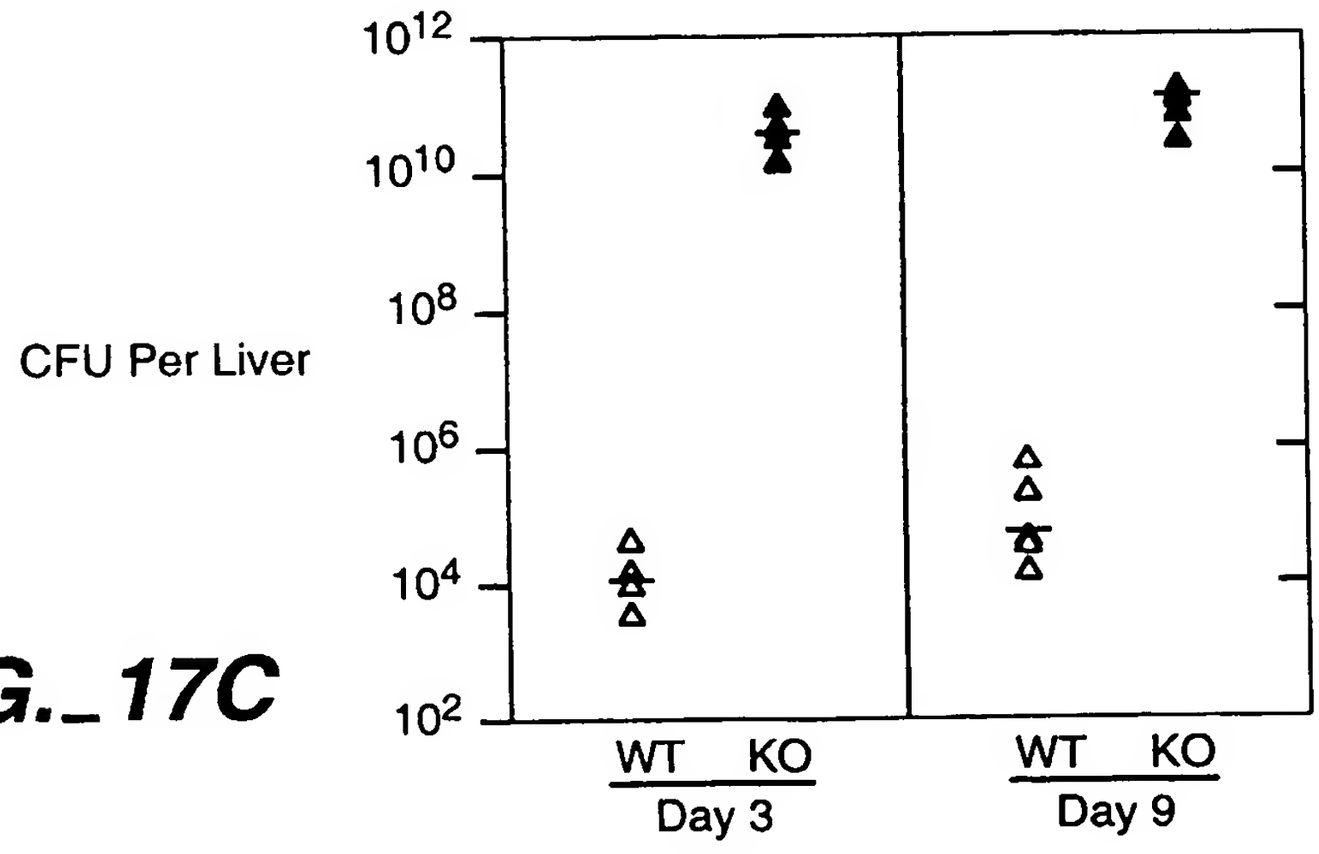


FIG._17C

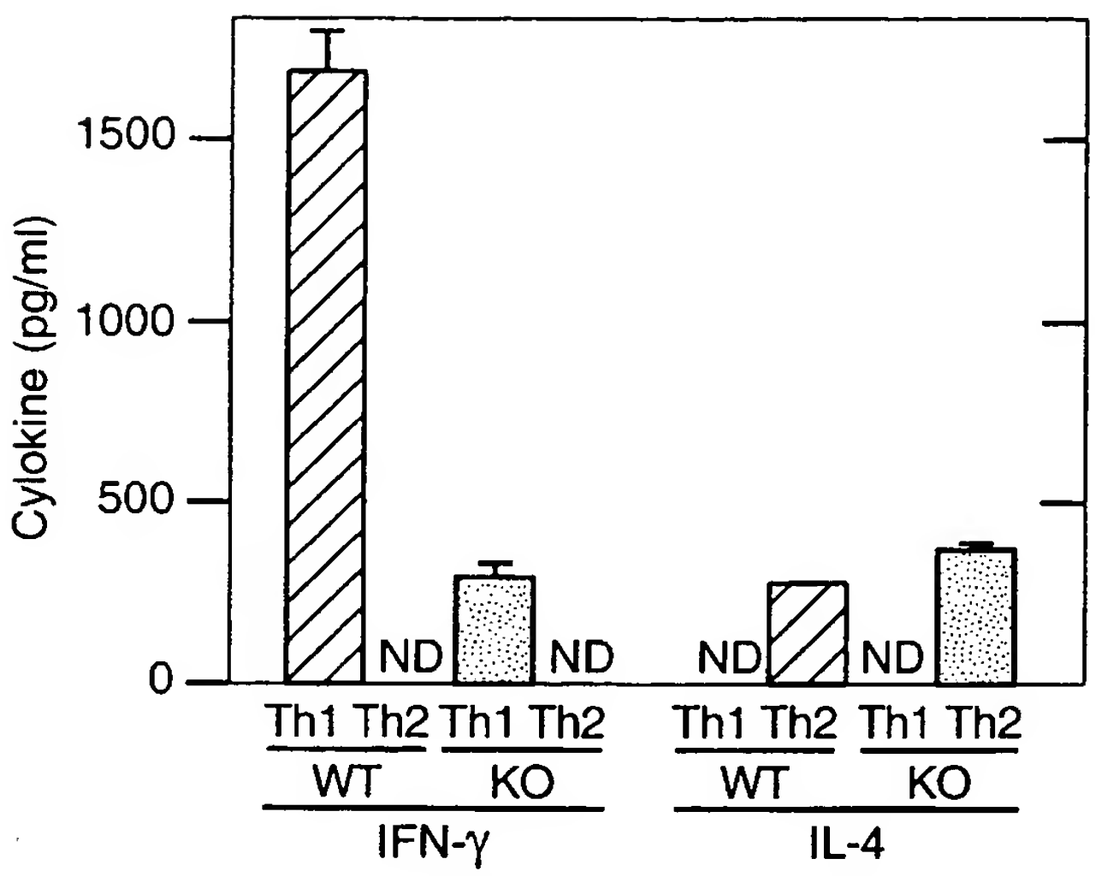


FIG._18A

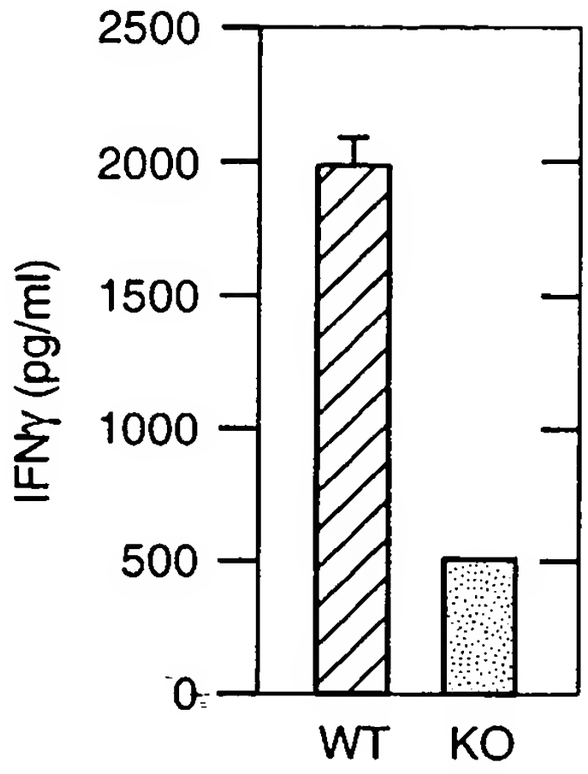


FIG._18B

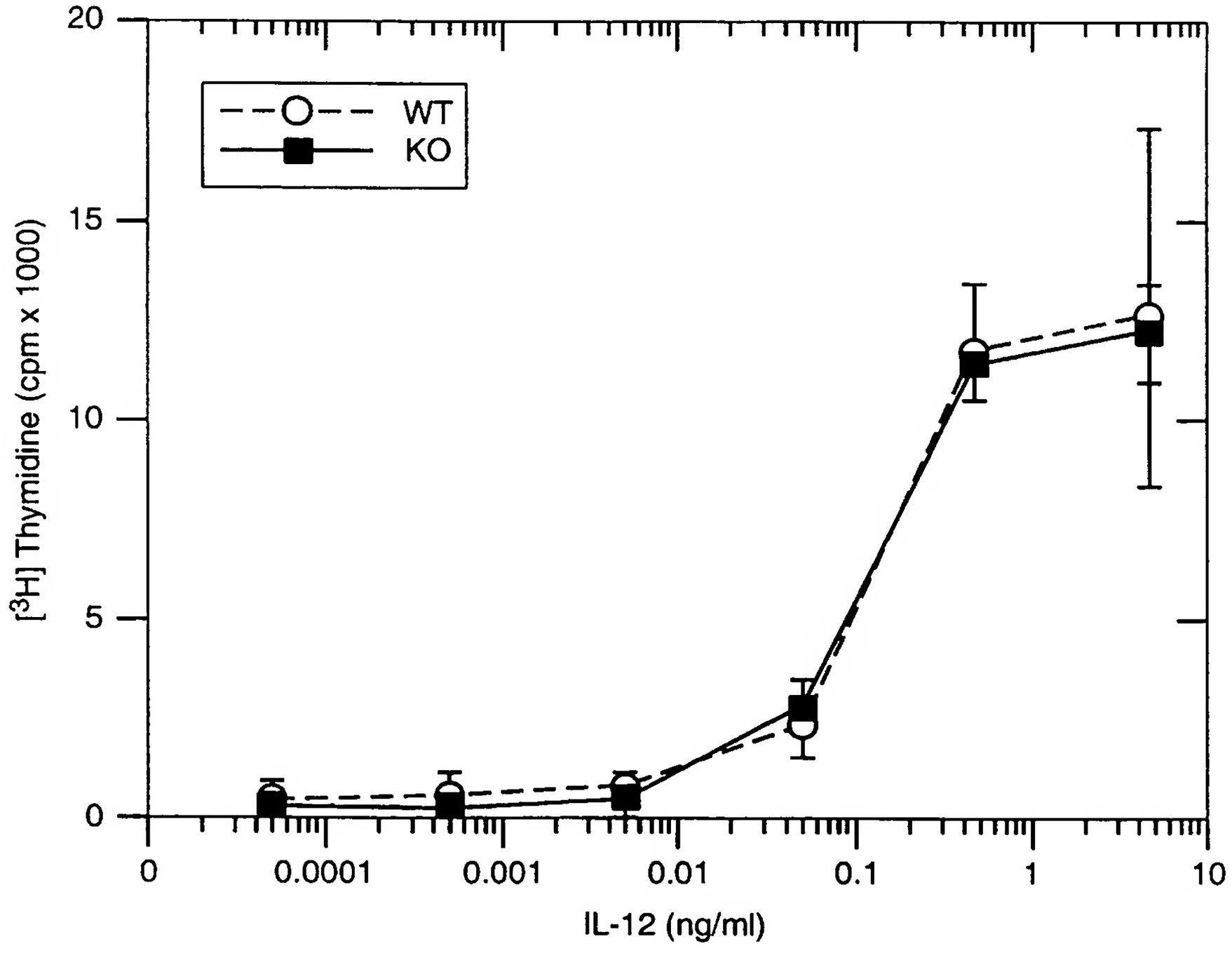


FIG._18C

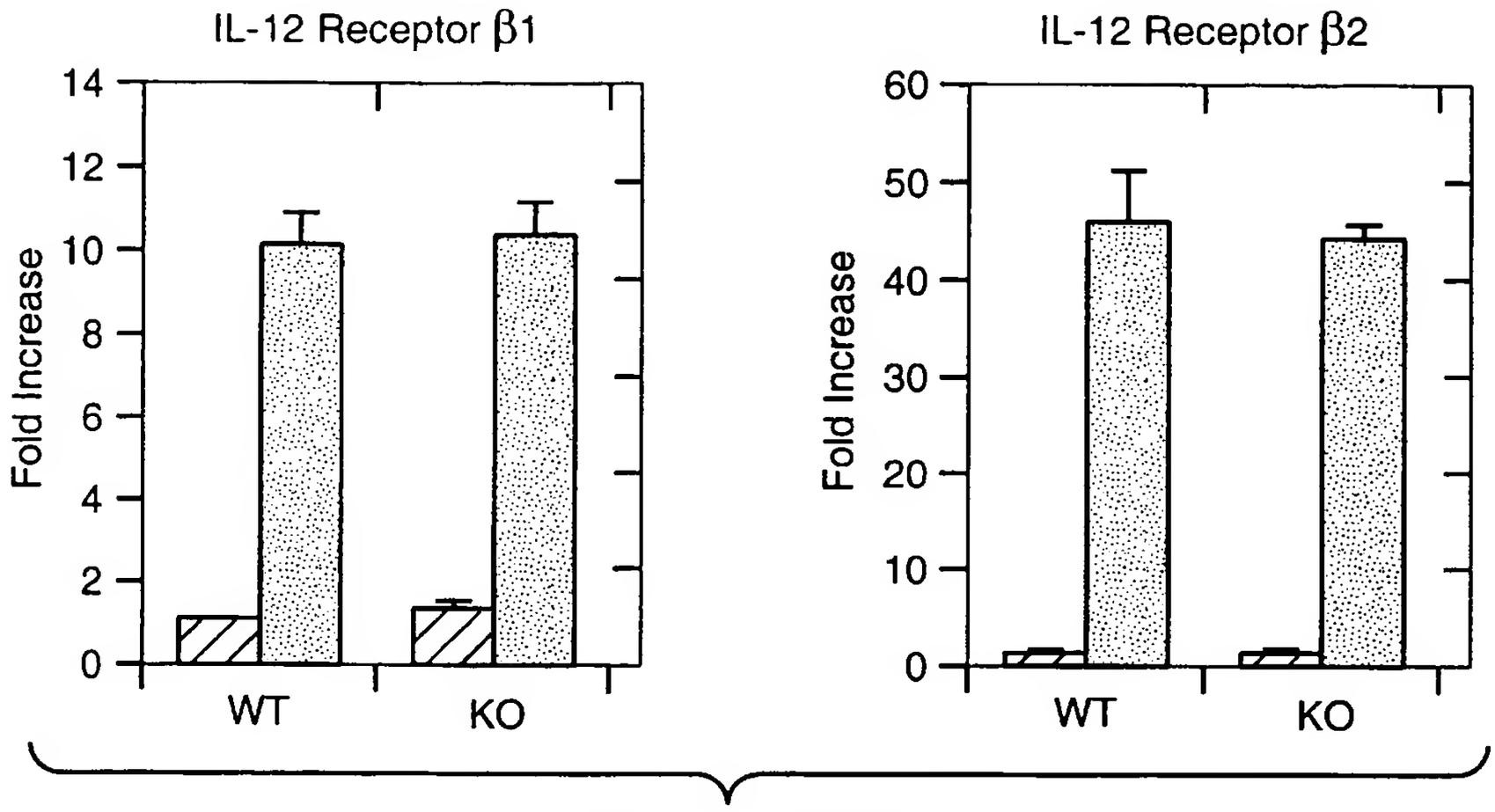


FIG._18D

Primer / Probe	Sequence	SEQ ID NO:
mTCCR, sense, Taqman	TGGTCTCTCCTGGCAACAGC	5
mTCCR, as, Taqman	AGCCAAGCACACCAGAGACA	6
mTCCR, Taqman probe	CAGCTGGGTGCCTCCCACCAA	7
mRPL19, sense, Taqman	ATCCGCAAGCCTGTGACTGT	8
mRPL19, as, Taqman	TCGGGCCAGGGTGTTTTT	9
mRPL19, Taqman probe	TTCCCGGGCTCGTTGCCG	10
mIL12Rb1, sense, Taqman	TCGCGTCTCTGGGAAGCT	11
mIL12Rb1, as, Taqman	TTTAAGCCAATGTATCCGAGACTG	12
mIL12Rb1, Taqman probe	CGCCAGCGTCCTCCTCGTGG	13
mIL12Rb2, sense, Taqman	CAAGCATTTGCATCGCTATCA	14
mIL12Rb2, as, Taqman	AATGCCTTTTGCCGGAAGT	15
mIL12Rb2, Taqman probe	ACGAATTGAGAACGTGCCCACCGT	16

FIG._19